

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number  
**WO 2005/021242 A1**

(51) International Patent Classification<sup>7</sup>: **B29C 65/00**,  
B31D 3/02, B29C 53/56

(21) International Application Number:  
PCT/US2004/028557

(22) International Filing Date:  
2 September 2004 (02.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/499,478 2 September 2003 (02.09.2003) US

(71) Applicant and

(72) Inventor: JUDKINS, Ren [US/US]; 46 Newgate Road,  
Pittsburgh, PA 15202 (US).

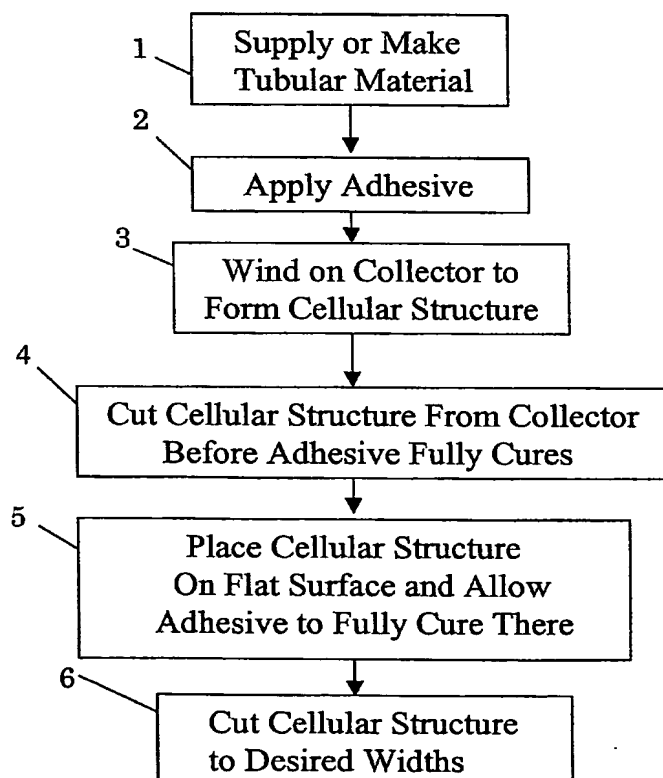
(74) Agent: ALSTADT, Lynn, J.; Buchanan Ingersoll, P.C.,  
One Oxford Centre, 20th Floor, 301 Grant Street, Pitts-  
burgh, PA 15219 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MAKING CELLULAR MATERIAL USING SLOW CURE ADHESIVES



(57) Abstract: A cellular structure is formed on a wheel (28) from an elongated tubular structure. At least one longitudinal line of a slow cure adhesive is applied to the exterior surface of the elongated tubular material. Then the material is wrapped around a collector wheel (44, 28) in a manner to cause the adhesive to be positioned between overlying surfaces of the elongated tubular material and to form a cellular structure on the collector. The cellular structure is cut from the collector before the adhesive has fully cured and is placed on a flat surface (9) where the adhesive has fully cured.



**Declaration under Rule 4.17:**

- *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*